PRODUCT INFORMATION

# DENSITY AND CONCENTRATION METER DIMF 2.0 PV

BOPP & REUTHER MESSTECHNIK

## MAIN CHARACTERISTICS

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|---|---|
| Product Type: | Density meter based on the oscillating U-tube principle with preamplifier |
| Application: | Density and concentration measurement of liquids |
| Measuring accuracy: | up to ± 0.02 % (± 0.2 kg/m³, ± 0.0002 g/cm³) of the measured value<br>up to ± 0.01 % (± 0.1 kg/m³, ± 0.0001 g/cm³) of the measured value (with special calibration) |
| Ex-approval: | Zone 1 |
| Process temperature: | -40°C up to 150°C (up to 160°C on request) |
| Process pressure: | up to max. 100 bar depending on process connection (up to 160 bar on request) |
| Housing material: | stainless steel (1.4571) |
| Wetted parts: | stainless steel, Hastelloy, Tantalum, Inconel, Monel, others on request |
| Power supply: | NAMUR |
| Output / Display: | NAMUR (original frequency) and Pt100 for connection to a flow computer e.g. UR06 |
| Process connection: | Flange acc. to DIN or ANSI |
| Special features: | Instrument version without seals |

## MEASUREMENT RANGE

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| Flow rate | 0 up to 50 l/min |
| Density range | 400 up to 3000 kg/m³ |
| Calibration range | 400 up to 1450 kg/m³ |
| Repeatability | ±0.005 % (±0.05 kg/m³) |

When installing in the bypass, ensure that there is sufficient flow in the unit so that the liquid sample in the unit is updated quickly enough (recommended approx. 0.3 l/min or approx. 0.01 bar differential pressure).

## PROCESS CONNECTION

Flange DN10 PN40 (DIN 2545), DN10 PN100 (DIN2547)
or Class 150/300 RF ANSI B16.5 other pressure stages on request, as well as various food connections

## OUTPUT SIGNALS

Connection: in 2-wire technology

Frequency density dependent, not linearized, the current is modulated onto the supply current, pulse-pause ratio 1:1, approx. 700-1400 Hz acc. to transducer type, linearization and temperature correction in the computer

4-wire technology via screw terminals;
cable enters via cable gland with M 20 x 1.5 or ½“ NPT thread for pipe installation (conduit system)
(PT100 installed in DIMF)

## EXAMPLES OF APPLICATION

- direct operating density or reference density measurement of corrosive liquids (incl. liquefied gases)
- Concentration measurement of 2-substance mixtures

Further information and product variants are available on request

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**Bopp & Reuther Messtechnik GmbH - Am Neuen Rheinhafen 4 - 67346 Speyer / Germany**
**Phone: +49 6232 657-0 Mail: info@bopp-reuther.com www.bopp-reuther.com**